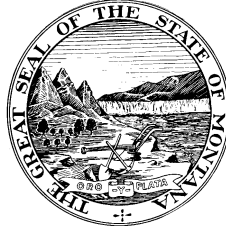


PUBLIC SERVICE COMMISSION
STATE OF MONTANA

Bill Gallagher, Chairman
Bob Lake, Vice Chairman
Kirk Bushman, Commissioner
Travis Kavulla, Commissioner
Roger Koopman, Commissioner



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May 2, 2014

Patrick R. Corcoran, Vice President
Government and Regulatory Affairs
NorthWestern Energy
40 East Broadway
Butte, MT 59701

RE: Data requests in Docket D2013.12.85

Dear Mr. Corcoran

Enclosed are data requests of the Montana Public Service Commission to NorthWestern Energy numbered PSC-269 through PSC-304 in the above-reference docket. Please begin the response to each new numbered data request on a new page. Please provide responses by May 16, 2014.

If you have questions, please contact me at 406-444-7627 or bdecker@mt.gov.

Sincerely,

Bob Decker
Public Policy Bureau
Montana Public Service Commission

Service Date: May 2, 2014

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

* * * * *

IN THE MATTER OF NorthWestern Energy's) REGULATORY DIVISION
Application for Approval to Purchase and)
Operate PPL Montana's Hydroelectric Facilities,) DOCKET NO. D2013.12.85
for Approval of Inclusion of Generation Asset)
Cost of Service in Electricity Supply Rates, for
Approval of Issuance of Securities to Complete
the Purchase, and for Related Relief

DATA REQUESTS PSC-269 THROUGH PSC-304 OF THE
MONTANA PUBLIC SERVICE COMMISSION
TO
NORTHWESTERN ENERGY

PSC-269

Regarding: Flashboard/Stanchion Systems
Witness: Wiseman

- a. How many of the hydro facilities still use flashboard/stanchion systems as opposed to gates or rubber dams?
- b. Please provide a list of flashboard maintenance and repairs that were performed within the last 10 years. For each repair indicate the reservoir level and the normal reservoir operating level.

PSC-270

Regarding: Flashboard Performance in Extreme Events
Witness: Wiseman

The witness states that flashboards "are actually tripped and used only on the very infrequent occurrence of high flood flows ..." and "... are available and functional when needed in an extreme event" (GTW-7). For each PPL hydro facility with a flashboard system, please provide examples of extreme events, along with dates and river flows for all events where the flashboards were tripped.

PSC-271

Regarding: Flashboard Maintenance with Bulkhead

Witness: Wiseman

The witness states that “[a]n available bulkhead allows maintenance or repairs without reservoir lowering” (GTW-8). Please describe how maintenance or repairs can be executed without the lowering of reservoir or headpond levels.

PSC-272

Regarding: Anchor Relaxation

Witness: Wiseman

- a. Please identify the specific hydro facilities that have rock anchors.
- b. The witness states that “[r]elaxation of anchors and the resulting potential for reduced effectiveness of anchors is an item recognized in the industry” (GTW-11). Do professional standards or institutional recommendations exist for how the relaxation of anchors is measured, monitored, documented, and ameliorated? If so, please provide relevant references.
- c. The witness states that “... routine and frequent surveillance and monitoring of a structure includes vertical and horizontal alignment surveys, monitoring piezometers for foundation pressure, monitoring drain flows for foundation conditions, and regular and documented visual surveillance of the structure This monitoring and assessment is a full and formal process performed to Federal Energy Regulatory Commission (“FERC”) requirements and reviewed by FERC.” Has PPLM maintained a monitoring and assessment program as described above for each of its hydro facilities?
- d. If the response to part (b), above, is yes, please provide a detailed description of the procedure, its frequency, and how results are recorded and acted upon.

PSC-273

Regarding: Anchor Assessment and Re-Analysis

Witness: Miller

Please explain what standards, institutional recommendations, or industry practices are used to determine when post tensioning relaxation becomes an issue that must be addressed.

PSC-274

Regarding: Remediation Plans
Witness: Miller

The witness stated that his review of dam safety documents included “remediation plans completed, currently underway and required to be implemented up through 2017” (RM-7). Please provide for each project information on the remediation plans referred to. If this information has already been provided, please cite the document or specific data request.

PSC-275

Regarding: Equipment Maintenance Strategy
Witness: Rhoads

- a. Is the “more aggressive maintenance strategy for individual equipment classes” (WTR-12) the same as the procedures contained in PSC-109(e), Attachments 1-9?
- b. Some of the maintenance strategies contained in PSC-109(e), Attachments 1-9, are either drafts or were issued in recent years. Are the procedures described therein new, or do they formalize the maintenance that has been historically performed on the equipment?
- c. Are records of tests and inspections of major overhauls, minor overhauls, and routine inspections kept? Is so, were they examined as part of the due diligence to determine the material condition of the apparatus?

PSC-276

Regarding: Transformer Tests and Plans
Witness: Rhoads

For transformers on the PPLM hydro system with an IEEE Category IV rating, please describe what measures NWE plans to take to address elevated levels of gassing and how those measures correlate with those contained in IEEE Std. C57-104 (*Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers*).

PSC-277

Regarding: Assessment of Equipment Condition
Witness: Miller

- a. In discussing the condition of rotor components, the witness refers on two occasions to HDR’s experience in assessing such components (RM-15, 10 and 14). In its development of the condition of the rotor components on PPLM’s hydro system, did HDR examine the machines and the inspection and test reports for the machines?

- b. If the answer to (a) is yes, please explain and provides copies of all notes, analyses, and work product.
- c. The witness states that HDR's capital expenditure forecast accounts for "the age of the components, the history of investments, and the operating environment of the assets ..." (RM-8, 1-3). In its forecast, did HDR make direct examination of the components and review the components' operating history and available test and assessment data?
- d. If the answer to (c) is yes, please explain and provides copies of all notes, analyses, and work product.

PSC-278

Regarding: Safeguards for Environmental Costs
Witness: Sullivan

The witness states that the management framework to comply with environmental conditions has built-in safeguards to reasonably control costs of environmental compliance (MGS-4) and describes two Memorandums of Understanding that cover nine of PPLM's 12 hydro facilities (MGS-5). Please describe the safeguards for the three remaining projects – Kerr, Mystic, and Thompson Falls, and provide copies of all Memorandums of Understanding, agreements, and other pertinent documents. If these documents have already been provided, please cite the document and specific data response.

PSC-279

Regarding: FERC Relicensing Costs
Witness: Sullivan

- a. Has PPLM historically funded relicensing efforts through its O&M budget?
- b. Has PPLM developed a budget estimate for the relicensing of the Thompson Falls Project?
- c. If the answer to (b) is "Yes," has NWE reviewed the budget estimate?
- d. If the answer to (b) is "Yes," please provide a copy of the budget estimate.
- e. What historic O&M work and costs would be foregone to allow for the addition of relicensing costs for Thompson Falls?

PSC-280

Regarding: Extent of Specific CapEx Information
Witness: Rhoads

In questioning the assertion in the Essex checklist that information on certain facility assets was unknown, the witness states that “Essex and the Commission indicated the record was not complete; yet they had from February 7 to February 21, 2014 to request additional specific information either through data requests or additional conference calls needed to complete their review” (WTR-6, 13-22). One of the Commission’s attempts to gain additional specific information is found in PSC-184(b), which asked witness Rhoads what evaluations and analyses were performed to develop the [DCF capital expenditure] cost estimates. In response, the witness cited reference to “routine annual O&M and capital expenditures,” but identified no specific investigations or analyses underlying the cost estimates.

- a. Were other evaluations or analyses on equipment and structures performed to develop the cost estimates in the DCF model?
- b. If the answer is yes, please provide copies of those evaluations and analyses.

PSC-281

Regarding: Independent Nature of HDR’s Work
Witness: Unknown

- a. Please provide any agreement or contract between HDR and NWE for work performed in relation to the former’s evaluation of the Hydros.
- b. What led NWE to decide to contract with another firm to review its due diligence work?
- c. How many conversations and exchanges of letters or emails did NWE and its employees or agents (including Shaw/CB&I) have with HDR during its work?
- d. How much has HDR been compensated for its work in this matter?
- e. NWE states that Mr. Miller is an independent expert. Please provide all written communications between NWE and its employees or agents (including Shaw/CB&I) and HDR.

PSC-282

Regarding: 20-Year Cap-Ex Budget
Witness: VanDaveer

In your testimony (JCV-5:14-17), you argue that specific items have been built in to a 20-year capital expenditures budget; however, in its presentation in Ex.__JMS-1, this budget

is so generic that it contains no specifics, other than to escalate a number, \$8.5 million, by 2.5% annually. It shows no variation year-to-year other than to escalate for this inflationary factor. How is this generic, non-itemized budget reconcilable with your claim that highly specific, one-off capital projects have been built into it?

PSC-283

Regarding: Experience with Dams While at PPL

Witness: VanDaveer

- a. Please describe your familiarity with the relicensing and Part 12 processes that PPL engaged in during your time there.
- b. Please describe your role in deciding on and planning the Rainbow Dam Redevelopment and Renovation project, including a description of why you understood it to have been undertaken and how far out it was scheduled.
- c. Identify the individuals at PPL responsible for making major capital decisions, such as the one described in (b), during your time there.
- d. To your knowledge, did PPL attempt to sell the Hydros during the time in which you were employed there?
- e. If the answer to (d) is yes, please describe the circumstances and whether you know of any party who conducted due diligence regarding a possible purchase. Please identify such part(ies).

PSC-284

Regarding: Independent Nature of CB&I's Work

Witness: VanDaveer

- a. Please explain the sense in which Gary Wiseman conducted an "external independent evaluation" (JCV-3:20-21).
- b. In conducting his due diligence review for NWE, did Gary Wiseman work together with NWE employees?
- c. How many conversations and exchanges of letters or emails did NWE and its employees or agents have with Shaw/CB&I's employees and agents during its work?
- d. How much has CB&I now been compensated for its work in this matter?
- e. Please provide any written communications or records of communications between NWE and Shaw/CB&I where the latter's evaluation of the Hydros is discussed.

PSC-285

Regarding: Unspecified Capital Budget
Witness: VanDaveer

- a. What do you mean by “unspecified capital budget” (JCV-5: 17)?
- b. What things does the unspecified capital budget include?

PSC-286

Regarding: Criticism of Essex Evaluation
Witness: VanDaveer and/or Miller

- a. You state that Essex “conveniently selected” the year 2021 to demonstrate that “the NorthWestern forecast is short based on its number exercise to complete annual sustenance capital work” (JCV:6:16-20). 2021’s capital budget is \$9.154 million (Ex__TEM-1). Is it NWE’s contention that this amount is sufficient for both the “sustenance CapEx” required and the “four developments for major capital projects” (JCV: 6:15, 6:17-18)?
- b. If the answer to (a) is yes, please explain, with reference to the specific costs of the four projects and expectations of needed sustenance cap-ex.
- c. Please explain why the cap-ex estimates found at Ex__RM-1, p. 24 for Rainbow, Cochrane, Morony, Holter, Thompson Falls, and Mystic decline from 2020 to 2021, before increasing again (to levels above 2020 spending) in 2022?
- d. For each of the facilities identified in (c), please describe what is driving the low figure (lower, in fact, than in any other year) for 2021?

PSC-287

Regarding: Arctic Grayling
Witness: Sullivan

- a. Is Madison the only facility exposed to possible liabilities that would result from regulation of the arctic grayling as an endangered species?
- b. If the answer to (b) is no, please identify the other Hydros that would be in your judgment possibly affected.

PSC-288

Regarding: Rainbow Powerhouse Demolition
Witness: Sullivan

- a. Has there been any progress in discussing alternatives to demolishing the Rainbow Powerhouse with local preservationists or others, since NWE last submitted a response to a data request on this topic?

- b. What other alternatives has NWE explored? Please explain.

PSC-289

Regarding: Probability of Issues of Concern Materializing

Witness: Wiseman

- a. You state that Essex presents concerns whose “potential costs are of a very low probability of occurrence.” (6:10-11). Have you quantified that probability, e.g., less than 5%, less than 10%?
- b. If the answer to (a) is yes, what probabilities would you assign for each of the primary concerns Essex raises?

PSC-290

Regarding: FERC Requirements of Capital Additions

Witness: Wiseman

- a. Do you know of examples where FERC has required or suggested (with it subsequently having been done) that dams replace flashboard/stanchion systems?
- b. If the answer to (a) is yes, please explain those circumstances for the cited examples.

PSC-291

Regarding: FERC Requirements of Capital Additions

Witness: Miller

- a. Do you know of examples where FERC has required or suggested (with it subsequently having been done) that dams replace rock anchors?
- b. If the answer to (a) is yes, please explain those circumstances for the cited examples.

PSC-292

Regarding: Meaning of “Satisfactory Condition” Finding

Witness: Wiseman

- a. You conclude that the “hydro system structures and facilities are in satisfactory condition” (GW-13:10-11). Does the word “satisfactory” have a particular meaning in your industry (i.e., are there gradations of condition, such as exceptional, satisfactory, marginal, unsatisfactory, etc.)?
- b. Please explain the word’s meaning in the context of your profession.

PSC-293

Regarding: Qualifications and Experience of Miller
Witness: Miller

- a. Please identify the “generally very old and very small” facilities you refer to on RM-2:13.
- b. Please provide the age and capacity of the facilities identified in (a).
- c. Please describe your knowledge of “grid operations” (RM-4:3).

PSC-294

Regarding: HDR Interviews with NorthWestern Representatives
Witness: Miller

- a. Who from NWE did you interview?
- b. Please provide notes that you took in the course of those interviews.

PSC-295

Regarding: HDR Interviews with PPL Representatives
Witness: Miller

- a. Did you interview any PPL staff?
- b. If the response to (a) is no, please explain why no interviews occurred.
- c. If the response to (a) is yes, please provide notes that you took in the course of those interviews.

PSC-296

Regarding: HDR Interviews with Essex Staff
Witness: Miller

- a. Did you interview Essex staff?
- b. If the response to (a) is no, please explain why.
- c. If the response to (a) is yes, please provide notes that you took in the course of those interviews.

PSC-297

Regarding: Clarification of Meaning of Due Diligence Report
Witness: Miller

In testifying about the “due diligence report and its supplemental reports” (RM-7: 16), please identify the supplemental reports to which you refer and provide them if they have not already been provided by another witness.

PSC-298

Regarding: Possible Liabilities Not Budgeted
Witness: Miller

- a. You state that NWE’s “projected CapEx estimates are sufficient to account for the known liabilities at this time” (RM-9: 6-7). What are the possible liabilities that the Commission should be concerned about?
- b. Has HDR taken a view of contingencies in NWE’s CapEx budget?
- c. Does HDR believe that the contingencies outlined by NWE has outlined sufficiently represent the range of contingent CapEx requirements that could be required of the dams?

PSC-299

Regarding: Unspecified CapEx
Witness: Miller

Please describe how you arrived at your “unspecified allocation of CapEx investments for each state for each year” (Exh___RM-1, p. 7)

PSC-300

Regarding: \$8.5 Million Forecast
Witness: Miller

- a. You state that “HDR’s recommended average CapEx budget of \$7.1 million per year (in 2014 dollars) compares favorably to NorthWestern’s projected \$8.5 million per year” (RM-9: 21-23). In Exh___TEM-1, is NWE forecasting a CapEx budget that it is \$8.5 million in 2014 dollars, or is it some other year?
- b. What would the \$8.5 million estimate in 2018 recorded in Exh___TEM-1 be in 2014 dollars?

PSC-301

Regarding: NWE Specific CapEx Estimates
Witness: Miller

Please identify where in the docket the NWE plant- and year-specific estimates that you present in Exh___RM-1, p. 9, can be found.

PSC-302

Regarding: Cost of CapEx Improvements
Witness: Miller

What source or sources did you use to derive the cost of specific upgrades listed in Exh___RM-1?

PSC-303

Regarding: DCF Runs of Scenarios
Witness: Stimatz

- a. Using your DCF model, what would the NPV be if the 30% increased and 15% decreased CapEx scenarios were run?
- b. Why do you not present updated DCF scenarios in your testimony?

PSC-304

Regarding: Due Diligence Supporting Memo
Witness: Miller

- a. Please identify where in NWE's submissions to the PSC in this docket the "supporting memo" you refer to (RM-16: 8) can be found.
- b. If the document has been withheld on the basis of privilege, please describe exactly what that privilege is (work product, attorney-client, etc.).
- c. If the document has been withheld on the basis of privilege, please explain whether you or NWE expect the PSC to rely on it in any way to determine or support NWE's claims regarding adequate due diligence.